

Amendments to the Specification:

Page 38, amend paragraph [0068] to read as follows:

[0068] Next, color distribution 102 in the thickness direction of a blood vessel is obtained (S202). For example, color distribution 102 in the thickness direction of a blood vessel is obtained by color information acquisition means 93 in relation to the color Doppler image read out from image memory 20. The obtained color distribution line 102 is a binarized chart, as shown in Fig. 12 (C), indicating "10" in relation to the coordinate of pixels in color, and "1" in relation to the coordinate of pixels in black and white.

Page 43, amend paragraph [0078] to read as follows:

[0078] Such an obtained 3-dimensional region is shown in Fig. ~~12~~ 14, region ~~400-200~~ is lumen region (blood flow region), region ~~401-201~~ is tunica externa region and region ~~402-202~~ is tunica intima + tunica media regions. Using region ~~402-202~~ of this 3-dimensional region, IMT measurement is performed. In concrete terms, the inner wall position of the tunica intima and the inner wall position of tunica externa ~~of the blood vessel~~ in a 3-dimensioanal region are extracted, and IMT is measured based on the distance between the point where the normal line of inner wall 60 of tunica intima 42 meets inner wall 62 of tunica externa 46 and the point of inner wall 60 of tunica intima 42. Also by emanating a line from the central point of the blood vessel cross-section, distance ~~404-204~~ between the intersecting points of inner wall 60 of tunica intima 42 and inner wall 62 of tunica externa 46 to the line may be measured. In this way by performing IMT measurement on all of the 3-dimensional regions, the measurement of IMT average value, maximum value and minimum value in these

regions and the 3-dimensional positional information of these measurement values are outputted on the screen.